

IN THE CLAIMS:

Please cancel claims 1-8, 10-12, 15 and 16 without prejudice to or disclaimer of the subject matter contained therein.

Please replace claims 9, 13, 14 and 17 as follow:

9. (Twice Amended) A fuel cell comprising:
at least a cell function assembly including an electrolytic membrane;
a pair of electrode plates assembled in contact with opposite surface of the electrolytic membrane;
a first separator placed in contact with one of the electrode plates to form a reaction chamber to be supplied with fuel gas;
a second separator placed in contact with the other electrode plate to form a reaction chamber to be supplied with oxidizing agent gas; and
a set of current-collecting plates assembled respectively in contact with the first and second separators at opposite outermost sides of the cell,
wherein the electrode plates each are divided into a plurality of spaced plates, and wherein the current-collecting plates each are divided into a plurality of spaced plates.

13. (Twice Amended) A manufacturing method of a separator for use in a fuel cell in which fuel gas and oxidizing agent gas are used as reaction gases, comprising:
pressing carbon powder containing a binder to form a plurality of projections each in the form of a conductive pillar body made of pressed carbon powder;
coating a sealing adhesive agent on a flat plate of synthetic resin;
assembling the projections with a plurality of mounting holes formed in the flat plate;
heating the projections by an electric current to melt the binder contained therein; and

cooling the projections to harden them in position in the separator.

14. (Thrice Amended) A manufacturing method of a separator for use in a fuel cell in which fuel gas and oxidizing agent gas are used as reaction gases, comprising:

pressing carbon powder containing a binder to form a plurality of projections, each in the form of a conductive pillar body;

assembling the projections with a plurality of mounting holes formed in a flat plate of synthetic resin;

heating the projections by an electric current to melt the binder contained therein; and

cooling the projections to harden them in position in the separator.

17. (Thrice Amended) A manufacturing method of a separator for use in a fuel cell in which fuel gas and oxidizing agent gas are used as reaction gases, comprising:

filling carbon powder containing a binder in a plurality of upward recesses formed in a lower molding die in such a manner as to correspond with a plurality of projections;

positioning a flat plate of synthetic resin formed with a plurality of through holes on the lower molding die in such a manner that the through holes of the flat plate are positioned to correspond with the upward recesses of the lower molding die and positioning an upper molding die formed with a plurality of downward recesses on the flat plate so that the downward recesses of the upper molding die are opposed to the upward recesses of the lower molding die through the through holes of the flat plate;

pressing the carbon powder filled in the upward recesses of the lower molding die toward the upper molding die by means of pressure means disposed in each bottom of the upward recesses so that the projections are formed across the through holes of the flat plate;

heating the molding dies under supply of an electric current to melt the binder contained in the projections; and